



THE IUCN RED LIST
OF THREATENED SPECIES™



Bubo bubo (Eurasian Eagle-owl)

European Red List of Birds

Supplementary Material

The European Union (EU27) Red List assessments were based principally on the official data reported by EU Member States to the European Commission under Article 12 of the Birds Directive in 2013-14.

For the European Red List assessments, similar data were sourced from BirdLife Partners and other collaborating experts in other European countries and territories. For more information, see BirdLife International (2015).

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Recommended citation

BirdLife International (2015) European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.

Further information

- <http://www.birdlife.org/datazone/info/euroredlist>
- <http://www.birdlife.org/europe-and-central-asia/european-red-list-birds-0>
- <http://www.iucnredlist.org/initiatives/europe>
- <http://ec.europa.eu/environment/nature/conservation/species/redlist/>

Data requests and feedback

To request access to these data in electronic format, provide new information, correct any errors or provide feedback, please email science@birdlife.org.

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Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate				Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Albania	50-100	<1	2002-2012	poor	-	5-10	2002-2012	poor	-	10-20	1980-2012	poor	
Andorra	2-3	<1	1998	medium	?				?				
Armenia	100-200	1	2002-2012	medium	?				?				
Austria	500-700	3	2001-2012	medium	0	0	2001-2012	medium	+	30-100	1980-2012	poor	
Azerbaijan	100-1,000	1	1996-2000	poor	?				?				
Belarus	250-400	1	2000-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Belgium	70-80	<1	2008-2012	medium	0	0	2000-2012	good	?				
Bosnia & HG	400-500	2	2010-2014	poor	-	5-10	2001-2012	poor	-	5-10	1980-2013	poor	
Bulgaria	450-550	2	2005-2012	medium	0	0-5	2000-2012	medium	0	0-5	1980-2012	medium	
Croatia	800-1,200	4	2010	medium	?				?				
Czech Rep.	600-900	3	2001-2003	good	-	16	2000-2012	medium	0	0	1980-2012	medium	
Denmark	39	<1	2011	medium	+	107	1999-2011	medium	+	1000-10000	1980-2011	medium	
Estonia	50-90	<1	2008-2012	good	-	20-50	2001-2012	good	-	50-70	1980-2012	good	
Finland	1,300-1,400	6	2001-2012	good	-	31-38	2001-2012	good	-	42-49	1982-2012	good	
France	2,000-4,000	12	2008-2012	medium	+	50-100	2000-2012	medium	+	400-900	1975-2011	medium	
Georgia	Present	<1			?				?				
Germany	2,100-2,500	10	2005-2009	good	+	44-98	1998-2009	good	+	118-210	1992-2009	good	
Greece	1,000-2,000	6	2008-2012	poor	?				?				
Hungary	50-60	<1	2006-2010	good	+	25-50	2000-2010	good	+	300-400	1980-2012	medium	
Italy	250-340	1	2006	medium	?				?				
Kosovo	20-40	<1	2009-2014	good	?				?				
Latvia	30-50	<1	2012	medium	?				+	0-150	1980-2012	medium	
Liechtenstein	4-5	<1	2009-2014	good	0	0	2003-2014	good	0	0	1980-2014	good	
Lithuania	20-30	<1	2008-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Luxembourg	15-20	<1	2008-2012	good	+	0-20	2000-2012	good	+	2500-3000	1980-2012	good	
FYRO Macedonia	100-300	1	2001-2012	poor	?				?				
Moldova	0-5	<1	2000-2010	medium	-	20-40	2000-2010	medium	-	30-50	1980-2010	medium	
Montenegro	100-200	1	2002-2012	poor	?				?				
Netherlands	6-8	<1	2008-2011	good	+	200-700	2000-2011	good	+	500-700	1985-2011	good	
Norway	450-685	2	2008-2013	good	-	5-20	2001-2013	good	-	25-50	1980-2013	medium	
Poland	270-380	1	2008-2012	medium	+	40-80	2000-2012	medium	+	110-140	1980-2012	medium	
Portugal	380-580	2	2008-2012	medium	0	0	2001-2012	poor	?				

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	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Romania	200-700	2	2001-2013	poor	?				?				
Russia	2,500-5,000	15	2000-2010	poor	?				?				
Serbia	330-450	2	2008-2012	medium	+	1-9	2000-2012	medium	+	1-9	1980-2012	medium	
Slovakia	300-400	1	2002	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Slovenia	80-100	<1	2008-2012	medium	+	0-10	2001-2012	medium	+	0-10	1980-2012	medium	
Spain	2,400	10	1998-2002	good	+	143	2006-2012	good	+		1980-2012	medium	
Sweden	390-560	2	2008-2012	good	-	20-50	2001-2012	medium	+	120-150	1980-2012	medium	
Switzerland	100-140	1	2008-2012	medium	+	5-54	2001-2012	medium	0	0	1990-2012	medium	
Turkey	500-2,000	4	2013	poor	-	20-29	2000-2012	poor	-	0-19	1990-2013	poor	
Ukraine	150-200	1	2000	medium	+	5-10	2001-2012	medium	+	10-25	1980-2012	medium	
EU27	12,500-17,900	63		Increasing									
Europe	18,500-30,300	100		Increasing									

¹ See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at <http://bd.eionet.europa.eu/article12/report>.

² The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

³ In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.

⁴ The robustness of regional trends to the effects of any missing or incomplete data was tested using plausible scenarios, based on other sources of information, including any other reported information, recent national Red Lists, scientific literature, other publications and consultation with relevant experts.

⁵ Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

⁶ Trend magnitudes are rounded to the nearest integer.

Trend maps

A symbol appears in each country where the species occurs: the shape and colour of the symbol represent the population trend in that country, and the size of the symbol corresponds to the proportion of the European population occurring in that country.

KEY

- | | |
|----------------------------------|----------------------------------|
| ▲ Large increase ($\geq 50\%$) | ▼ Large decrease ($\geq 50\%$) |
| ▲ Moderate increase (20–49%) | ▼ Moderate decrease (20–49%) |
| ▲ Small increase (<20%) | ▼ Small decrease (<20%) |
| ↑ Increase of unknown magnitude | ↓ Decrease of unknown magnitude |

- Stable or fluctuating
- Unknown
- Present (no population or trend data)
- ✗ Extinct since 1980

Each symbol, with the exception of Present and Extinct, may occur in up to three different size classes, corresponding to the proportion of the European population occurring in that country.

- ↑ Large: $\geq 10\%$ of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small: <1% of the European population

The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Figure 1. Breeding population sizes and short-term trends across Europe.

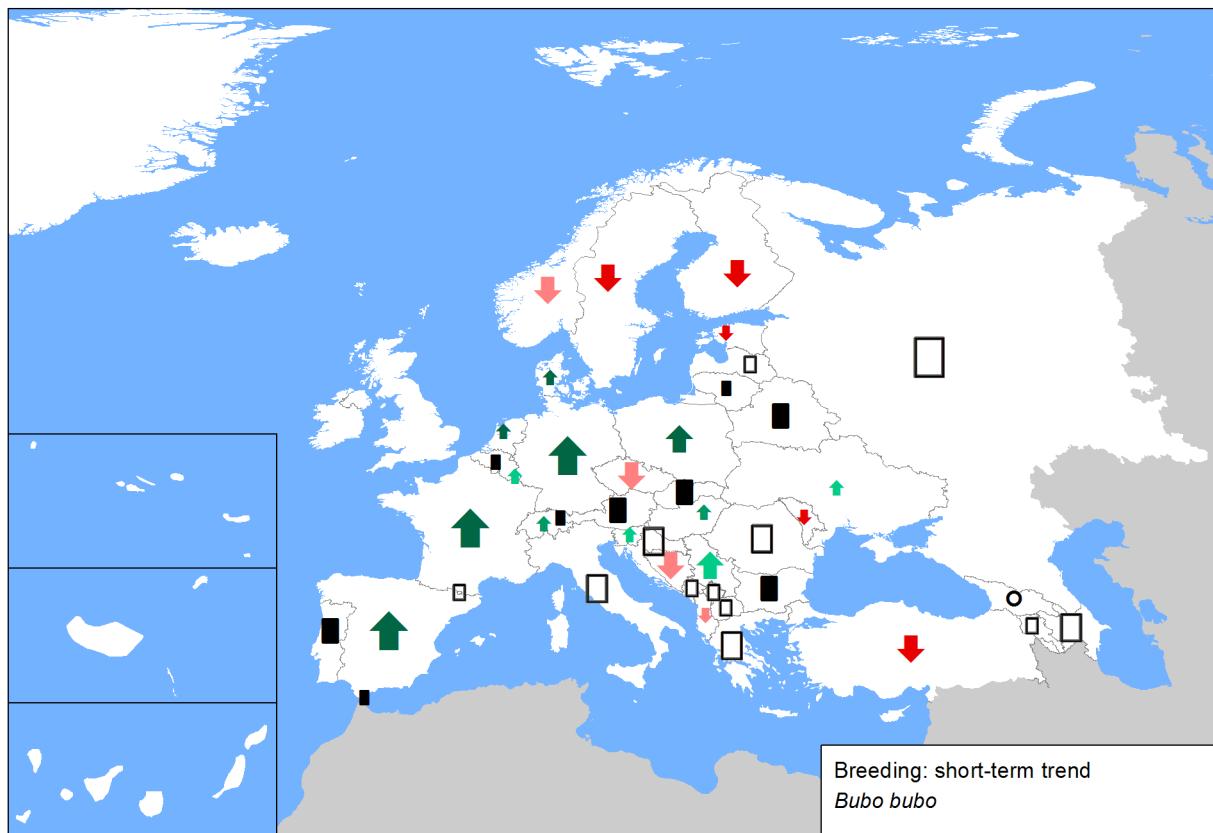
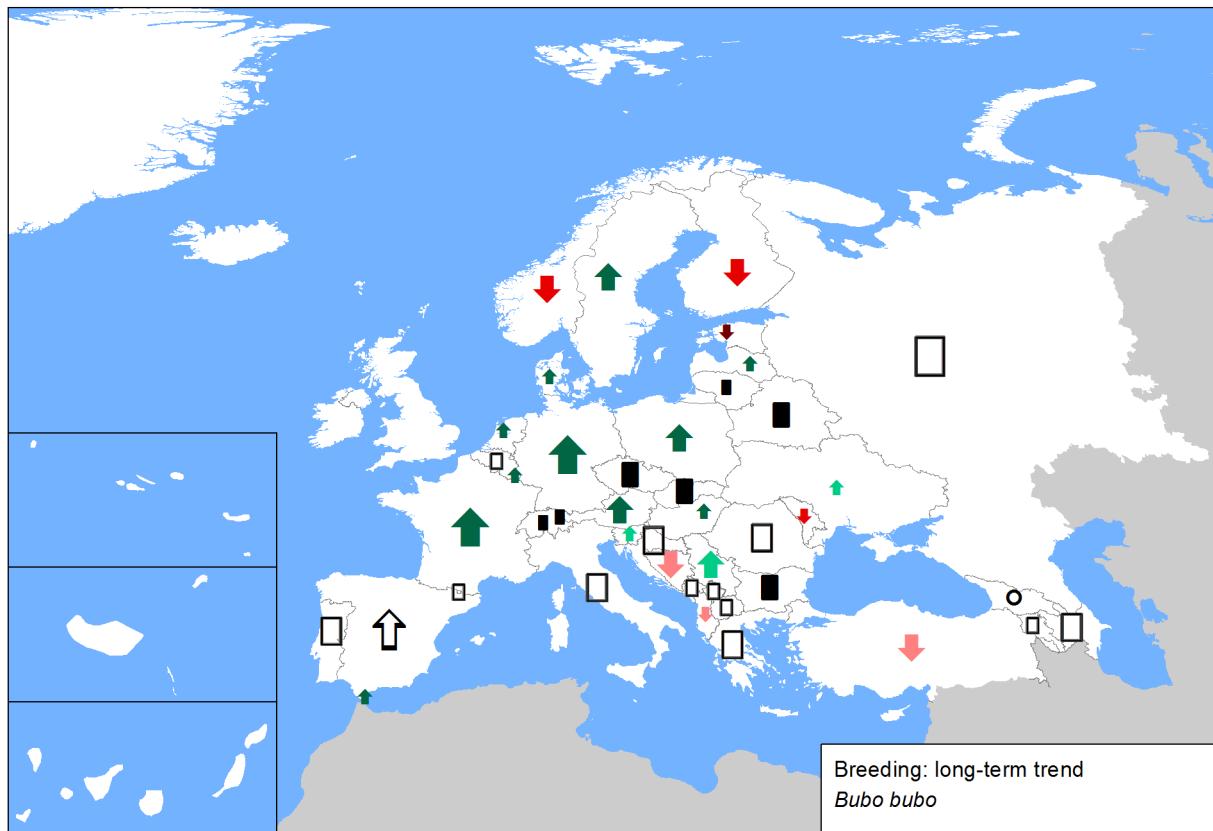


Figure 2. Breeding population sizes and long-term trends across Europe.



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Sources

Albania

Breeding population size: Bino pers. obs.

Breeding short-term trend: Bino pers. obs.

Breeding long-term trend: Bino pers. obs.

Andorra

Breeding population size: BirdLife International 2004

Armenia

Breeding population size: ASPB data

Austria

Breeding population size: BirdLife Austria, estimate on the basis of available unpublished and published population data

Breeding short-term trend: BirdLife Austria, estimate on the basis of available unpublished and published trend data

Breeding long-term trend: BirdLife Austria, estimate on the basis of available unpublished and published trend data

Azerbaijan

Breeding population size: BirdLife International 2004

Belarus

Breeding population size: Zhuravliev D.V. - personal communication

Breeding short-term trend: BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series, No 12).

Breeding long-term trend: Nikiforov M.E., Kozulin A.V., eds. Belarussian birds at the beginning of XXI century: status, numbers, distribution. - 1997. - Minsk. - 187 p.

Belgium

Breeding population size: Didier Vangeluwe, Royal Institute of Natural Sciences, com.pers.

Breeding short-term trend: D. Vangeluwe, com. pers.

Breeding long-term trend: Comparison between 2008-2012 estimate and Devillers, 1989 (Atlas of the Belgian Breeding Bird) population estimate

Bosnia and Herzegovina

Breeding population size: Kotrošan, D., Drocic, N., Trbojević, S., Šimić, E., Dervović, I., 2012: Program IBA, Međunarodno značajna područja za ptice, u Bosni i Hercegovini. Ornitolosko društvo "Naše ptice", interno izdanje za projekat "Evaluacija IBA područja u FBiH", Sarajevo., Kotrošan, D. & Hatibović, E., 2012: Raptors in Bosnia and Herzegovina – status and perspectives for monitoring. *Acrocephalus* 33 (154/155): 173-179.

Breeding short-term trend: unpublisht data

Breeding long-term trend: unpublisht data

Bulgaria

Breeding population size: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. [Http://e-ecodb.bas.bg/rdb/en/vol2/](http://e-ecodb.bas.bg/rdb/en/vol2/) BSPB Bird Database

Breeding short-term trend: ankow, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. [Http://e-ecodb.bas.bg/rdb/en/vol2/](http://e-ecodb.bas.bg/rdb/en/vol2/) BSPB Bird Database

Breeding long-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. Botev, B. (ed.) 1985. Red Data Book of Bulgaria, Vol. 2, Animals, Sofia, BAS, 183 p. Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. [Http://e-ecodb.bas.bg/rdb/en/vol2/](http://e-ecodb.bas.bg/rdb/en/vol2/) BSPB Bird Database

Croatia

Breeding population size: Zavod za ornitologiju (Sanja Barišić, Davor Ćiković, Jelena Kralj, Goran Sušić, Vesna Tuttiš), Dragan Radović, Ivan Budinski, Robert Crnković, Antun Delić, Dubravko Dender, Vlatka Dumbović, Ivan Darko Grlica, Bariša Ilić, Luka Jurinović, Davor Krnjeta, Krešimir Leskovar, Duje Lisičić, Ivica Lolić, Gordan Lukač, Kristijan Mandić, Krešimir Mikulić, Tibor Mikuska, Gvido Piasevoli, Andrej Radalj, Zlatko Ružanović, Vlatka Šćetarić, Mirko Šetina, Adrian Tomik (2013): Procjene brojnosti za SPA područja. Državni zavod za zaštitu prirode, Zagreb

Breeding short-term trend: BiE III Work group, Croatia

Breeding long-term trend: BiE III Work group, Croatia

Czech Republic

Breeding population size: STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnizdneho rozsireni ptaku v Ceske republike. Aventinum Praha.

Breeding short-term trend: CIHAK K., KLOUBEC B., KUCERA Z., POPRACH K. & VRANA J. in press: Monitoring druhu prilohy I směrnice o ptacich a ptacich oblasti v letech 2008-2010. AOPK CR

Breeding long-term trend: STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnizdneho rozsireni ptaku v Ceske republike. Aventinum Praha.

Denmark

Breeding population size: Lange, Peter (2012): Fugleåret 2011. Dansk Ornitoligisk Forening.

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Denmark

Breeding short-term trend: Nyegaard et al. (2014): Truede og sjældne ynglefugle i Danmark 1998-2012 - With a summary in English: Rare and threatened breeding birds in Denmark 1998-2012. DOFT 108(1). In prep. Nyegaard, T. (2012): Truede og sjældne ynglefugle i Danmark 2011. Trykt hos Svendborg Tryk Eskildsen, A. & T. Vikstrøm. (2010): Truede og sjældne ynglefugle i Danmark 2010. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2009): Truede og sjældne ynglefugle i Danmark 2008. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2008): Truede og sjældne ynglefugle i Danmark 2007. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2007): Truede og sjældne ynglefugle i Danmark 2006. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2006): Truede og sjældne ynglefugle i Danmark 2005. DOFT 100: 11-28. Nyegaard, T. & M.B. Grell (2005): Truede og sjældne ynglefugle i Danmark 2004. DOFT 99: 88-106. Grell, M.B., Heldbjerg, H., Rasmussen, B., Stabell, M., Toft, J. & T. Vikstrøm (2004): Truede og sjældne ynglefugle i Danmark 1998-2003. Midtvejsrapport fra Dansk Ornitoligisk Forenings Arbejdsgruppe for Truede og Sjældne Ynglefugle (DATSY). DOFT 98: 45-100.

Breeding long-term trend: Nyegaard et al. (2014): Truede og sjældne ynglefugle i Danmark 1998-2012 - With a summary in English: Rare and threatened breeding birds in Denmark 1998-2012. DOFT 108(1). In prep. Nyegaard, T. (2012): Truede og sjældne ynglefugle i Danmark 2011. Trykt hos Svendborg Tryk Eskildsen, A. & T. Vikstrøm. (2010): Truede og sjældne ynglefugle i Danmark 2010. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2009): Truede og sjældne ynglefugle i Danmark 2008. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2008): Truede og sjældne ynglefugle i Danmark 2007. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2007): Truede og sjældne ynglefugle i Danmark 2006. Dansk Ornitoligisk Forening. Nyegaard, T. & M.B. Grell (2006): Truede og sjældne ynglefugle i Danmark 2005. DOFT 100: 11-28. Nyegaard, T. & M.B. Grell (2005): Truede og sjældne ynglefugle i Danmark 2004. DOFT 99: 88-106. Grell, M.B., Heldbjerg, H., Rasmussen, B., Stabell, M., Toft, J. & T. Vikstrøm (2004): Truede og sjældne ynglefugle i Danmark 1998-2003. Midtvejsrapport fra Dansk Ornitoligisk Forenings Arbejdsgruppe for Truede og Sjældne Ynglefugle (DATSY). DOFT 98: 45-100.

Estonia

Breeding population size: Elts, J., Leito, A., Leivits, A., Luigijõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. Hirundo 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Breeding short-term trend: Elts, J., Leito, A., Leivits, A., Luigijõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. Hirundo 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Breeding long-term trend: Elts, J., Leito, A., Leivits, A., Luigijõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. Hirundo 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Finland

Breeding population size: Birds of Prey monitoring data, Finnish Museum of Natural History. Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – Linnut-vuosikirja 2012: 50–61. (in Finnish with English summary)

Breeding short-term trend: Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – Linnut-vuosikirja 2012: 50–61. (in Finnish with English summary)

Breeding long-term trend: Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – Linnut-vuosikirja 2012: 50–61. (in Finnish with English summary)

France

Breeding population size: <http://www.atlas-ornitho.fr/>

Breeding short-term trend: Rocamora, G. & Yeatman-Berthelot, D. 1999 Oiseaux menacés et à surveiller en France. Liste rouge et priorités. Populations - Tendances - Menaces - Conservations , LPO - SEOF, Paris, 560 p. Mezami S. 2008 Statut du Grand duc Bubo bubo en Bourgogne, 83-90 Rahola P. 2007 Confirmation de la présence du Grand duc Bubo bubo dans le Sommiéros (Gard), 74

Breeding long-term trend: Rocamora, G. & Yeatman-Berthelot, D. 1999 Oiseaux menacés et à surveiller en France. Liste rouge et priorités. Populations - Tendances - Menaces - Conservations , LPO - SEOF, Paris, 560 p. Mezami S. 2008 Statut du Grand duc Bubo bubo en Bourgogne, 83-90 Rahola P. 2007 Confirmation de la présence du Grand duc Bubo bubo dans le Sommiéros (Gard), 74

Georgia

Breeding population size: Galvez, R.A., Gavashelishvili, L., Javakhishvili, Z. 2005. Raptors and Owls of Georgia (Field guide). Tbilisi, GCCW & Buneba Print Publishing. Tbilisi: 128 pp. (in English & in Georgian).

Germany

Breeding population size: Gedeon, K., C. Grüneberg, A. Mitschke & C. Sudfeldt (in Vorb.): Atlas Deutscher Brutvogelarten. SVD & DDA, Münster.

Breeding short-term trend: Monitoring Greifvögel und Eulen

Breeding long-term trend: Monitoring Greifvögel und Eulen

Greece

Breeding population size: Hellenic Ornithological Society database

Hungary

Breeding population size: Petrovics, Z. (2012): Uhu állomány adatok - 2010 / Eagle Owl population data 2010 (In Hungarian with English summary.) Heliaca 8: 50-51. Breeding bird (MME RTM) database. National Park Direcorates& databases.

Breeding short-term trend: Petrovics, Z. (2012): Uhu állomány adatok - 2010 / Eagle Owl population data 2010 (In Hungarian with English summary.) Heliaca 8: 50-51. Breeding bird (MME RTM) database. National Park Direcorates& databases.

Breeding long-term trend: Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest. 247 p. National Park Direcorates& databases.

Italy

Breeding population size: Brichetti P & Fracasso G. 2006. Ornitologia italiana.Vol.3 (Sturnariidae-Caprimulgidae). Alberto Perdisa Editore, Bologna

Breeding short-term trend: Gustin M, Brambilla M & Celada C. 2009. Valutazione dello stato di conservazione dell'avifauna italiana. Specie in Allegato I della Direttiva Uccelli. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Lega Italiana Protezione Uccelli (LIPU)

Breeding long-term trend: Brichetti P & Fracasso G. 2006. Ornitologia italiana. Vol.3 (Sturnariidae-Caprimulgidae). Alberto Perdisa Editore, Bologna Gustin M, Brambilla M & Celada C. 2009. Valutazione dello stato di conservazione dell'avifauna italiana. Specie in Allegato I della Direttiva Uccelli. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Lega Italiana Protezione Uccelli (LIPU)

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Kosovo

Breeding population size: NGO "Finch" (2014)

Latvia

Breeding population size: Juris Lipsbergs

Breeding long-term trend: Juris Lipsbergs Strazds M., Priednieks J., Vaverins G. 1994. Latvijas putnu skaits. – Putni daba, 4: 3–18.

Liechtenstein

Breeding population size: Willi, G. (2014) Unpublished collection data

Breeding short-term trend: Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22).

Breeding long-term trend: Willi, G. & M.F. Broggi (1985) Die Vogelwelt des Fürstentums Liechtenstein unter Berücksichtigung der benachbarten Gebiete; Teil II: Galliformes (Hühnervögel) – Piciformes (Spechtvögel). Ber. Bot.-Zool. Ges. Liechtenstein-Sargans-Werdenberg, Band 14, S. 103-143.; Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22).

Lithuania

Breeding population size: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p.

Breeding short-term trend: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p. Raudonikis L. 2004. Lithuania. In: Birds in Europe: population estimates, trends, and conservation status. BirdLife International, BirdLife Conservation Series No12, Cambridge, UK. Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007)

Breeding long-term trend: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) BirdLife International/European Bird Census Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007)

Luxembourg

Breeding population size: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., T. Conzemius (2007): Der Uhu *Bubo bubo* in Luxemburg. Regulus Wissenschaftliche Berichte, 22:36-41 (<http://www.luxnatur.lu/publi/wb22001072.pdf#page36>) Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

Breeding short-term trend: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., T. Conzemius (2007): Der Uhu *Bubo bubo* in Luxemburg. Regulus Wissenschaftliche Berichte, 22:36-41 (<http://www.luxnatur.lu/publi/wb22001072.pdf#page36>) Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

Breeding long-term trend: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., T. Conzemius (2007): Der Uhu *Bubo bubo* in Luxemburg. Regulus Wissenschaftliche Berichte, 22:36-41 (<http://www.luxnatur.lu/publi/wb22001072.pdf#page36>) Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3 Melchior E., E. Mentgen, R. Peltzer, R. Schmitt, J. Weiss (1987): Atlas der Brutvögel Luxemburgs. Lëtzebuerger Natur- a Völleschutzliga. Kremer-Muller & Cie, Foetz, Luxembourg

The Former Yugoslav Republic of Macedonia

Breeding population size: Velevski, M., B. Hallmann, B. Grubač, T. Lisičanec, E. Stoynov, E. Lisičanec, V. Avukatov, L. Božić, and B. Stumberger. 2010. Important Bird Areas in Macedonia: Sites of Global and European Importance. *Acrocephalus* 31:181–282.

Moldova

Breeding population size: The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

Breeding short-term trend: The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

Breeding long-term trend: 1. Аверин Ю. В., Ганя И.М., Успенский Г. Птицы Молдавии, том 2, Кишинев, 1971, 2. Зубков Н.И. .Хищные птицы и совы Молдавии (биология, охрана и практическое значение). Автореф.канд.дисс. Кишинев, 1983, 24 с. 3. Burfield I., Bommel van F., Birds in Europe. Population estimates, trends and conservation status. BirdLife International. Oxford, 2004. 374p.

Montenegro

Breeding population size: Puzovic, S., Simic, D., Saveljić, D., Gergelj, J., Tucakov, M., Stojnic, N., Hulo, I., Ham, I., Vizi, O., Sciban, M., Ruzic, M., Vukanovic, M., Jovanovic, T. (2004): Birds of Serbia and Montenegro – Size of nesting populations. I trends: 1990-2002. *Ciconia* 12,

Netherlands

Breeding population size: NEM, Sovon en CBS (Boele et al. 2011-2013, van Dijk et al 2010), Oehoe Werkgroep Nederland

Breeding short-term trend: Boele et al. (2013), SOVON (2002), Oehoe Werkgroep Nederland

Breeding long-term trend: Sovon, Oehoe Werkgroep Nederland

Norway

Breeding population size: Øien, I.J., Heggøy, O., Shimmings, P., Aarvak, T., Jacobsen, K.-O., Oddane, B., Ranke, P.S. & Steen, O.F. 2014. Status for hubro i Norge. NOF- rapport 2014-8. 71 s.

Breeding short-term trend: 1). Heggøy, O. & Øien, I.J. 2014. Conservation status of birds of prey in Norway. Norsk Ornitolologisk Forening rapport 1/2014. 129 sider. 2). Jacobsen, K.-O., Øien, I.J., Steen, O.F., & Røv, N. 2008. Hubroens bestandsstatus i Norge. Vår Fuglefauka 31: 150-158.

Breeding long-term trend: Heggøy, O. & Øien, I.J. 2014. Conservation status of birds of prey in Norway. Norsk Ornitolologisk Forening rapport 1/2014. 129 sider.

Bubo bubo (Eurasian Eagle-owl)

Poland

Breeding population size: Compilation of regional figures: KRAINIA ŚWIĘTOKRZYSKA (Towarzystwo Badań i Ochrony Przyrody, R. Maniarski, M. Jantarski i inni), KUJAWY (P. Zieliński i inni), LUBELSKO-ŚWIĘTOKRZYSKA (Lubelskie Towarzystwo Ornithologiczne, M. Urban, P. Szewczyk, P. Stachyra), MAŁOPOLSKA (M. Ciach, R. Bobrek, T. Wilk), MAZOWSZE (Mazowiecko-Świętakrzyskie Towarzystwo Ornithologiczne: S. Chmielewski, A. Dombrowski, A. Goławski, H. Kot), PODLASIE (T. Tumiel, G. Grygoruk), POMORZE (L. Ławicki, A. Sikora), ŚLĄSK (P. Kołodziejczyk i inni), ŚLASK GÓRNY (J. Betleja), WARMIA I MAZURY (D. Czaśkiewicz, K. Jankowski, M. Szynkiewicz, A. Sikora), WIELKOPOLSKA (P. Wylegała, L. Kuczyński), ZIEMIA LUBUSKA (P. Czechowski, S. Rubacha, P. Baranowski, M. Jankowski, R. Kruszyk, M. Leszczyński, M. Prange, J. Udolf), ZIEMIA ŁÓDZKA (T. Janiszewski, Z. Wojciechowski, P. Minias, R. Włodarczyk, B. Lesner, M. Wężyk).

Breeding short-term trend: Chyłarecki P., Sikora A. 2007. Ocena liczebności gatunków lęgowych w Polsce. W: Sikora A., Rohde Z., Gromadzki M., Neubauer G., Chyłarecki P. (red.). Atlas rozmieszczenia ptaków lęgowych Polski 1985–2004. Bogucki Wyd. Nauk. Poznań, s. 34–41; BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. BirdLife International Series No. 12.

Breeding long-term trend: Tucker G.M., Heath M.F. 1994. Birds in Europe: their conservation status. Cambridge, UK: BirdLife International

Portugal

Breeding population size: Aguiar A, Lopes AL, Pimenta M, Luís A (2010) Owls (Strigiformes) in Parque Nacional Peneda-Gerês (PNPG) – Portugal. Nova Acta Científica Compostelana (Bioloxia) 19:83-92; Grilo C, Sousa J, Ascensão F, Matos H, Leitão I, Pinheiro P, Costa M, Bernardo J, Reto D, Lourenço R, Santos-Reis M, Revilla E 2012 Individual spatial responses towards roads: implications for mortality risk. PLoS ONE 7(9): e43811. DOI:10.1371/journal.pone.0043811; Lourenço RF, MP Basto, R Cangarato, S Coelho, MC Álvaro, V Oliveira, MC Pais 2002. The owl (Order Strigiformes) assemblage in the North-eastern Algarve. Airo 12: 25-33; Silva CC, Lourenço R, Godinho S, Gomes E, Sabino-Marques H, Medinas D, Neves V, Silva C, Rabacá JE, Mira A 2012 Major roads negatively affect Tawny Owl abundance and Little Owl presence. Acta Ornithologica 47:47–54. DOI 10.3161/000164512X653917; Tomé R, Catry P (coords.) 2008. Atlas da fauna do Vale do Côa. Município de Pinhel. Pinhel. 180 pp.; Tomé R., Catry P, Bloise C, Korpimäki E 2008 Breeding density and success, and diet composition of Little Owls *Athene noctua* in steppe-like habitats in Portugal. Ornis Fennica 85:22-32; Equipa Atlas (2008). Atlas das Aves Nidificantes em Portugal (1999-2005). Instituto da Conservação da Natureza e da Biodiversidade, Sociedade Portuguesa para o Estudo das Aves, Parque Natural da Madeira e Secretaria Regional do Ambiente e do Mar. Assírio e Alvim. Lisboa

Breeding short-term trend: Programa NOCTUA

Romania

Breeding population size: "Milvus Group" Bird and Nature Protection Association database, unpublished data Romanian Ornithological Society database, unpublished data Komáromi I., Kovács I., 2008. Evaluarea populațiilor de pasari din Parcul National Muntii Macinului – Report realized by Milvus Group for the Macin Mountains National Park Kovács I., Barbos L., Bóné G.M., Daróczi J. Sz., Kis R.B., Komáromi I., Latkova H., Marton A., Papp T., Zeitz R. (2013): - Evaluarea pasarilor de interes comunitar în zona Hărtibaciului - Târnava Mare - Olt. - Raport realizat pentru Asociația WWF Programul Dunare Carpați România. Asociația "Grupul Milvus", Târgu Mureș,.

Russia

Breeding population size: Volkov S.V., Sharikov A.V., Morozov V.V. (eds.). 2009. Owls of the Northern Eurasia. Moscow: 304 p. (in Russian). Volkov S.V., unpublished. owl_bird@mail.ru Belik V.P. 2005. Cadastre of breeding avifauna of South Russia. - Strepet 3, no. 1-2: 5-37 (in Russian).

Breeding short-term trend: Volkov S.V., Sharikov A.V., Morozov V.V. (eds.). 2009. Owls of the Northern Eurasia. Moscow: 304 p. (in Russian). Volkov S.V., unpublished. owl_bird@mail.ru Shepel A.I. 2013. Rare bird species in Perm Territory (numbers, conservation issues). – Problems and outlook of bird conservation in Russia. Proc. of All-Russian Conference, Moscow-Makhachkala: 128-131 (in Russian). Numerov A.D. 1996. Class Birds Aves. – Natural resources of Voronezh Region. Vertebrate Animals. Cadaster. Voronezh, Biomik: 48-159 (in Russian). Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. (in Russian). Klimov S.M., Sarychev V.S., Melnikov M.V., Zemlyanukhin A.I. 2004. Fauna of the Upper Don Basin. Nonpasserines. Lipetsk, LGPU: 224 p. (in Russian).

Breeding long-term trend: Voronetsky V.I. (ed.). 1994. Eagle Owl in Russia, Belorussia and Ukraine. Collection of scientific papers. Moscow, MSU: 201 p. (in Russian). Belik V.P. et al. 2003. Recent population trends of breeding birds in the Southern Russia. - Strepet 1: 10-30 (in Russian). Shepel A.I. 2013. Rare bird species in Perm Territory (numbers, conservation issues). – Problems and outlook of bird conservation in Russia. Proc. of All-Russian Conference, Moscow-Makhachkala: 128-131 (in Russian). Numerov A.D. 1996. Class Birds Aves. – Natural resources of Voronezh Region. Vertebrate Animals. Cadaster. Voronezh, Biomik: 48-159 (in Russian). Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. (in Russian). Klimov S.M., Sarychev V.S., Melnikov M.V., Zemlyanukhin A.I. 2004. Fauna of the Upper Don Basin. Nonpasserines. Lipetsk, LGPU: 224 p. (in Russian).

Serbia

Breeding population size: BPSSS (2014) Unpublished data

Breeding short-term trend: BPSSS (2014) Unpublished data

Breeding long-term trend: BPSSS (2014) Unpublished data

Slovakia

Breeding population size: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Breeding short-term trend: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Breeding long-term trend: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Slovenia

Breeding population size: Denac, K., T. Mihelič, L. Božič, P. Kmecl, T. Jančar, J. Figelj & B. Rubinić (2011): Strokovni predlog za revizijo posebnih območij varstva (SPA) z uporabo najnovejših kriterijev za določitev mednarodno pomembnih območij za ptice (IBA). Končno poročilo (dopolnjena verzija). Naročnik: Ministrstvo za okolje in prostor. DOPPS – BirdLife, Ljubljana.

Breeding short-term trend: www.ptice.si/atlas

Breeding long-term trend: www.ptice.si/atlas

Spain

Breeding population size: Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitológia. Madrid, 733 pp. (http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)

Bubo bubo (Eurasian Eagle-owl)

Spain

Breeding short-term trend: SEO/BirdLife (2013). Resultados del programa Sacre de SEO/BirdLife en 2012. SEO/BirdLife. Madrid. Información obtenida a partir de la Base de Datos del Inventario de especies terrestres. Seguimiento de Aves SACRE. (Ministerio de Agricultura, Alimentación y Medio Ambiente). http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/tendencia_aves_comunes_espania.aspx Gráfica de la tendencia poblacional: http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/ieet_aves_sist_seg_tendencia_comunes_esp.aspx <http://www.seo.org/RESULTADOS-SEGUIMIENTO-DE-AVES/>

Breeding long-term trend: Purroy, F.J. (Coord.) (1997). Atlas de las aves de España (1975-1995). SEO/BirdLife. Lynx Edicions. Barcelona. Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)

Sweden

Breeding population size: Ottosson, U., Ottvall, R., Elmberg, J., Green, M., Gustafsson, R., Haas, F., Holmqvist, N., Lindström, Å., Nilsson, L., Svensson, M., Svensson, S. & Tjernberg, M. 2012. Fåglarna i Sverige - antal och förekomst. Sveriges Ornitologiska Förening, Halmstad. Conny Philipsson - riksinvetering 2009 (ej publicerad)

Breeding short-term trend: Swedish Bird Survey (Svensk Fågeltaxering), Lund University.

Breeding long-term trend: Swedish Bird Survey (Svensk Fågeltaxering), Lund University. Conny Philipsson - riksinvetering 2009 (ej publicerad)

Switzerland

Breeding population size: Original estimate: Schmid, H., R. Luder, B. Naef-Daenzer, R. Graf & N. Zbinden (1998); Schweizer Brutvogelatlas. Verbreitung der Brutvögel in der Schweiz und im Fürstentum Liechtenstein 1993-1996/Atlas des oiseaux nicheurs de Suisse. Distribution des oiseaux nicheurs en Suisse et au Liechtenstein en 1993-1996. Schweizerische Vogelwarte/Station ornithologique suisse, Sempach. Updated based on trend and with data from monitoring programmes and chance observations.

Breeding short-term trend: Swiss Ornithological Institute: <http://www.vogelwarte.ch/information-service-monitoring-rare-breeding-and-visiting-birds.html> Site-occupancy modelling based on „semi-standardised“ chance observations. Percentage change based on linear regression. Min Max refer to 95% Confidence interval.

Breeding long-term trend: Swiss Ornithological Institute: <http://www.vogelwarte.ch/information-service-monitoring-rare-breeding-and-visiting-birds.html> Site-occupancy modelling based on „semi-standardised“ chance observations. Percentage change based on linear regression. 95% Confidence interval see point 3.3.

Turkey

Breeding population size: Murat Bozdogan, Soner Bekir, Cemil Gezgin personalcommunication Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Türkiye'nin Önemli Doğa Alanları. Doğa Derneği, Ankara. www.kusbank.org Kirwan G.M., Boyla K. A., Castell P., Demirci B., Özén M., Welch H., Marlow T., 2008, Birds of Turkey. Londra, Christopher Helm, 978-1-4081-0475-

Breeding short-term trend: Doğa Derneği, Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Key Biodiversity Areas of Turkey (Türkiye'nin Önemli Doğa Alanları) Doğa Derneği, Ankara, KILIÇ, T., EKEN, G. 2004, Türkiye'nin Önemli Kuş Alanları Güncellemesi, Doğa Derneği. Ankara.

Breeding long-term trend: Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12)

Ukraine

Breeding population size: 1. Tucker G.M., Heath M.F. Birds in Europe: their conservation status. - Cambridge. U.K. Bird Life Conservation Series №. 3. 1994. 600 p. 2. Hagemajer W.J.M., Blair M.J. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. Poyser. - London. 1997. 903 p. 3. Heath M.F., Evans M.I. Important birds areas in Europe. Priority sites for conservation. // Southern Europe. BirdLife International. - Cambridge. Vol.2., 2000. P. 691-724. 4. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 5. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р.

Breeding short-term trend: 1. Численность и размещение гнездящихся околоводных птиц в водно-болотных угодьях Азово-Черноморского побережья Украины. Под ред. В.Д. Сиохин / Wetland International Киев. 2000. 476 с. 2. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 3. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р.

Breeding long-term trend: 1. Tucker G.M., Heath M.F. Birds in Europe: their conservation status. - Cambridge. U.K. Bird Life Conservation Series №. 3. 1994. 600 p. 2. Hagemajer W.J.M., Blair M.J. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. Poyser. - London. 1997. 903 p. 3. Heath M.F., Evans M.I. Important birds areas in Europe. Priority sites for conservation. // Southern Europe. BirdLife International. - Cambridge. Vol.2., 2000. P. 691-724. 4. European birds populations; Estimates and trends Compiled by M. Heath, C. Borggreve, N. Peet, W. Hagemeyer/ BirdLife International/EBCC. 2000. Cambridge, UK: BirdLife Conservation Series N10, 160 p. 5. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 6. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р.

Bibliography

- Holt, W., Berkley, R., Deppe, C., Enríquez Rocha, P., Petersen, J.L., Rangel Salazar, J.L., Segars, K.P., Wood, K.L. and de Juana, E. 2013. Eurasian Eagle-owl (*Bubo bubo*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2013. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/55008> on 12 March 2015).
- König, C., Weick, F., Becking, J.-H. 2008. Owls of the world. Christopher Helm, London.
- Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. Cambridge, U.K.: BirdLife International (BirdLife Conservation Series no. 3).